



# The Devil's in the Details

**HOW THE AMENDMENT 37 RULES ADDRESS  
ON-SITE SOLAR RESOURCES**

**FEBRUARY 22, 2006**

**Rick Gilliam**  
**Senior Energy Policy Advisor**  
**WESTERN RESOURCE**  
**ADVOCATES**



## WESTERN RESOURCE ADVOCATES



## *Energy Program*

- Established in 1991 to advocate for sustainable energy policies in six states of the Interior American West
- Interdisciplinary staff
- Active in state, regional, and national forums
- Focus on electric power industry

[www.WesternResourceAdvocates.com](http://www.WesternResourceAdvocates.com)



# A37 Solar Applicability

- *QRUs that are not municipal or cooperative utilities*
  - *Meaning investor-owned utilities*
    - *Public Service Company of Colorado*
    - *Aquila, Inc.*
- *Municipal and cooperative utilities*
  - *Must offer an optional pricing program allowing retail customers to support emerging renewable technologies through rates*
    - *Fort Collins*
    - *Colorado Springs*



I Lied ..... EPAct 2005

## *Solar Tax Credits*

- Residential: 30% with a \$2,000 maximum
  - Optimizes at about \$6,700 net cost
- Commercial: 30% with no maximum
- Resource:

Solar Energy Industries Association

*Guide to Federal Tax Incentives for Solar Energy*

[www.seia.org](http://www.seia.org)



# Renewable Energy Credits 3659

*A contractual right to the full set of non-energy attributes*

*1 MWh = 1 REC*

- PUC authorized RECs from QF contracts to default to QRU
- RECs may be acquired with or without electricity for compliance
- RECs may be used for compliance in year generated and the 5 subsequent compliance years
- PUC deleted *environmental claims* from double-counting list
- QRU entitled to count on-site solar RECs from small systems even if the system is subsequently removed or becomes inoperational
- Each QRU to develop a REC tracking system



# On-site Solar System 3650(h)

- *Characteristics:*
  - *located on the premises of a consumer within the service territory of a QRU or a utility that may become a QRU;*
  - *primary business may not be electricity generation;*
  - *maximum generator of 2 MW*
- Translation:
  - May be on or off-grid anywhere in Colorado
  - Can't be located at power plants
  - Must have some relationship to on-site load



# On-site Solar Rebates 3658

- \$2.00/W for systems  $\leq 100$  kW
- Additional \$/W for RECs from systems  $\leq 10$  kW
- For systems  $> 10$  kW but  $\leq 100$  kW: ???
- Systems eligible for Standard Rebate Offer
  - Sized between 500 W and 100 kW, inclusive
  - Operational on or after December 1, 2004
  - By June 1, 2006: One time offer to buy RECs from:
    - off-grid systems  $\leq 10$  kW, and
    - pre-12/1/04 grid-connected systems  $\leq 10$  kW



## On-site Solar Rebates (cont.)

- QRU receives 20 years of RECs in return for rebate
- Rebate adjusted if modeled output differs from optimally-oriented fixed system by more than 10%
- Other
  - Administrative process for customers installing small systems must be simple
  - Equipment must be new
  - System must be permanently installed
  - Expansions eligible for rebates
- RECs from systems  $> 100$  kW also to be acquired





# Net Metering Rule 3664

- Monthly excess generation offsets the following month's consumption
- Year end excess compensated at average hourly incremental cost of generation for previous year
- Generator capacity may not exceed:
  - Customer's service entrance capacity
  - Two Megawatts
- Metering Requirements
  - Single bi-directional meter for systems  $\leq 10$  kW
  - Second meter to measure RECs for systems  $> 10$  kW



# Interconnection Rule 3665

- Based upon FERC Order 2006
- Three general classes:
  - Level 1: systems  $\leq 10$  kW
  - Level 2: systems  $> 10$  kW  $\leq 2$  MW
  - Level 3: systems  $> 2$  MW but  $\leq 10$  MW
- Insurance
  - \$300,000 for systems  $\leq 10$  kW
  - \$2,000,000 for systems  $> 10$  kW  $\leq 2$  MW
  - Case by case for systems  $> 2$  MW
- Level 1 Application form: simplified 2 ½ pages



**WESTERN RESOURCE**  
ADVOCATES

## *Contact Information:*

Rick Gilliam

2260 Baseline Road Suite 200

Boulder, Colorado 80020

303-444-1188 ext. 218

[rgilliam@westernresources.org](mailto:rgilliam@westernresources.org)

